

LOSHKIN, A.M., AGEYEV, V.I., SHKUD, M.A.

"Automation of Radio Transmitters," Elektrosvyaz' Jan. 1956

LOSHKIN, E.; RUMYANTSEV, A.F.,redaktor.

[Circulating capital in Soviet industry and its use] Oborotnye
fondy sovetskoi promyshlennosti i ikh ispol'zovanie. Moskva,
Vysshaya partiinaya shkola pri TsK KPSS, 1954. 37 p. [Microfilm]
(Russia--Industries--Finance) (MLRA 8:1)

LOSHKIN, E.

The supply of material and equipment as a factor in the growth
of labor productivity. Sots.trud. no.4:12-23 Ap '56. (MLRA 9:11)

(Materials) (Labor productivity)

KONYUKHOV, N.; MASHORIN, B., master proizvodstvennogo obucheniya; LOSHKIN, G.

News from schools. Prof.-tekh. obr. 20 no.6:32 Je '63.
(MIRA 16:7)

1. Pomoshchnik direktora po kul'turno-vospitatel'noy rabote,
tekhnicheskoye uchilishche No.2, Kuybyshev (for Loshkin).
(No subject headings)

LOSHKIN, L.M.

BRESHADSKIY, G.Yu.; *LOSHKIN, L.M.*

VZM-4 vacuum-seamer machine. Kons. i ov. prom. 13 no.2:10-13 F '58.
(MIRA 11:2)

1. Spetsial'noye konstruktorskoye byuro Ukrainskogo nauchno-issle-
dovatel'skogo instituta konservnoy promyshlennosti.
(Canning industry--Equipment and supplies)

BERSHADSKIY, G.Yu.; LOSHKIN, L.M.

Calculating forces occurring during the rolling of tin cans.
Kons. i ov. prom. 13 no.6:18-24 Je '58. (MIRA 11:5)

1.Spetsial'noye konstruktorskoye byuro Ukrainskogo nauchno-
issledovatel'skogo instituta konservnoy promyshlennosti.
(Containers) (Canning industry)

LOSHKIN, V.^A; VARACKII, L.; KROL, L.

Injection governors for superheated high-pressure steam. Tr. from the Russian. p. 68. ENERGETIKA. (Ministerstvo paliv a energetiky. Hlavni sprava elektraren) Praha. Vol. 5, no. 2, Feb. 1957.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

LOSHKIN, V.A., kandidat tekhnicheskikh nauk; KROL', L.B., kandidat tekhnicheskikh nauk.

Recommendations for designing natural circulation boilers for very high steam parameters. Teploenergetika 3 no.11:3-10 N '56.
(MLRA 9:12)

1. Vsesoyuznyy teplotekhnicheskii institut.
(Boilers)

LOSHKINA, A.M., KETILADZE, Y.S., KNYAZEVA, I.D., ALEKSYEVA, A.A., SOROKINA, Y.Y.

"Some clinical and laboratory observations on Respiratory Tract Diseases of
Virus and Rickettsial Origin. Prague, Czech. 23-27 May 1961.

GOL'DSHTEYN, M.I., kand. tekhn. nauk; KAMPANIYETS, G.M., inzh.; PANFILOVA,
L.M., inzh.; RABINOVICH, D.M., inzh.; MURAV'YEV, Ye.A., inzh.;
LOSHKINA, N.A., inzh.

Effect of vanadium and heat treatment on th properties of St.
3kp rimmed steel. Stal' 24 no.10:925-927 O '64.

(MIRA 17:12)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov
i Nizhne-Tagil'skiy metallurgicheskiy kombinat.

SMIRNOV, L.A.; TIMONINA, V.M.; KORNEYEV, N.D.; LOSHKINA, N.A.

Investigating the quality and mechanical properties of
St. 3ps plate steel. Stal' 25 no.6:511-516 Je '65.

(MIRA 18:6)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallow
i Nizhne-Tagil'skiy metallurgicheskiy kombinat.

1 53978-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) JD
ACCESSION NR: AP5014866 UR/0133/65/000/006/0553/0557 22
621.43.669.15.194 218

AUTHOR: Freydenzon, Ye. Z.; Rabinovich, D. M.; Vinokurov, I. Ya.; Loshkina, N. A.;
Naymushina, L. F.; Freydenzon, Yu. Ye.

TITLE: Ways of improving the mechanical properties of low-carbon and low alloy
steel sheets and sections

SOURCE: Stal', no. 6, 1965, 553-557

TOPIC TAGS: toughening, low carbon steel, low alloy steel, sheet steel,
steel section, steel beam, quenched steel, toughened steel, spray quenching,
quenching tank, impact toughness

ABSTRACT: Since the toughening of low-carbon and low-alloy metal by means of
heat treatment requires substantial capital investments, it is of interest to
consider other techniques. The authors describe the work being done in this
field at the Nizhny Tagil Metallurgical Combine with respect to the toughening
of metal while it still is in heated state immediately after its rolling or
forging. Beams, sheets, and strips were either immersed in a quenching water-
tank installed at the end of the roller table or passed through an experimental

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L 53978-65
ACCESSION NR: AP5014866

spray installation. For stabilization of the properties at the required level and enhancement of plasticity after the toughening by quenching in the tank, it is expedient to perform additional tempering by means of the available heat-treatment equipment. In the spray installation the required level of properties can be attained by adjusting the pressure and delivery rate of the cooling water. The effect of temperature was more precisely determined in laboratory experiments with 3sp steel: cooling in water from temperatures corresponding to the monophasic (γ) and two-phase ($\gamma + \alpha$) regions exerts a marked and nearly identical toughening effect and produces an impact toughness (at $+20^{\circ}\text{C}$) at the level of 8-10 kg-m/cm². In this way, the strength qualities of low-carbon metal could be increased 15-25%, and those of low-alloy metal, 30-50%, without detriment to plastic properties and impact toughness in the presence of negative temperatures and after mechanical aging. Toughening beyond these limits usually deteriorates the plastic properties of the metal. The uniformity of cooling over the area of the metal is of special importance. Orig. art. has: 4 figures, 5 tables.

ASSOCIATION: Nizhne-Tagil'skiy metallurgicheskiy kombinat (Nizhniy Tagil Metallurgical Combine)

Card 2/3

L 53978-65

ACCESSION NR: AF5014866

SUBMITTED: 000

ENCL: 00

SUB CODE: MM

NO REF SOV: 005

OTHER: 001

Card

3/3

VISLOGUZOV, G.I., inzh.; RABINOVICH, D.M., inzh.; ORLOVA, N.I., inzh.;
SHMANNIN, I.A., inzh.; KOMPANIYETS, G.M., inzh.; KONDRAT'YEV,
S.N., inzh.; LOSHKINA, N.A., inzh.

Nonmetallic inclusions in rails in various methods of deoxidizing
steel. Stal' 25 no.6:557-559 Je '65. (MIRA 18:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.

LOSHKOV, S.

Conference on methods for improving the reliability of electric machines for rolling mills. Vest. elektroprom. 27 no.4:76-77 Ap '56. (MIRA 9:11)

1. Zavod "Elektrosila" imeni S. M. Kirova.
(Rolling mills--Electric driving) (Electric motors)

LOSHKOVY, I., kapitan, spetsialist 1-go klassa; LITVIYAK, P., kapitan;
LOGVINENKO, A., starshiy serzhant, komandir rascheta puskovykh
ustanovok

We are missilemen. Voenn.-znan. 41 no.12:8-9 D '65.
(MIRA 18:12)

LUNDINA, M.G., kand.tekhn.nauk; Prinimali uchastiye: LOSHLYAK, L.L., mladshiy nauchnyy sotrudnik; YERMOLAYEVA, A.I., mladskiy nauchnyy sotrudnik; SAFRONOVA, Z.A., mladskiy nauchnyy sotrudnik; RAUKHMAN, B.R., inzh.; METLITSKAYA, S.S.; SHISHKONOVA, L.I.; MURAV'YEVA, L.V.

Investigating the processing of clay in making bricks. Trudy NII Stroi keramiki no. 14:3-35 '59. (MIRA 14:1)

1. Obshchesoyuznyy nauchno-issledovatel'skiy institut stroitel'noy keramiki (for Koshlyak, Yermolayeva, Safronova).
 2. Nachal'nik laboratorii Vorontsovskogo kirpichnogo zavoda (for Shishkanova).
 3. Nachal'nik laboratorii Nizhne-Kotel'skogo kirpichnogo zavoda (for Shishkanova).
 4. Nachal'nik laboratorii Moskovskogo eksperimental'nogo zavoda (for Murav'yeva).
- (Clay)

86736

5.5800 (1043, 1273, 1221) S/120/60/000/006/011/045
E032/E314
AUTHORS: Goman'kov, V.I., Kasatkin, S.N., Kiselev, S.V.,
Loshmanov, A.A. and Ozerov, R.P.
TITLE: A Neutron-diffraction Apparatus Working in
Conjunction with the WPT (IRT) Reactor
PERIODICAL: Priroda i tekhnika eksperimenta, 1960, No. 6,
pp. 45 - 48

TEXT: A description is given of a neutron diffractometer designed for investigating poly- and monocrystals. A collimated neutron beam of 8×10^9 neutrons/cm² sec with a horizontal divergence of 7' was employed. The neutrons were monochromatized by a reflection from the (200) plane of a NaCl monocrystal having an area of 12×50 mm², or from the (111) plane of a lead monocrystal having an area of 80×200 mm². The reflection curves for the two crystals are shown in Figs. 1 and 2. A photograph of the apparatus as a whole is shown in Fig. 3. The apparatus can be used to measure directly the angular positions of the diffraction maxima ϑ_{200} , ϑ_{400} and ϑ_{600} .
By reflecting the neutron beam from NaCl crystals, a

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E032/E314

A Neutron-diffraction Apparatus Working in Conjunction with the IRT Reactor

monochromatic neutron beam with $\lambda = 0.97 \text{ \AA}$ was obtained. The wavelength spread was about 0.01 \AA and the half-width of the monochromatic peak was $20'$. The flux of monochromatic neutrons was $\sim 10^5$ neutrons/cm²sec. The crystal-monochromator was set up on a table of a goniometer so that the position of the crystal could be adjusted with respect to the incident beam. The monochromatised beam was then passed through a second cadmium collimator and struck the specimen under investigation which was fixed on the table of the neutron diffractometer. The diffractometer (Fig. 3) is in the form of an H section beam, 180 cm long, which can be rotated about the vertical axis through angles between 0 and 180° . The angular position of the rotating beam can be estimated to within 3 min. The beam is rotated by a DC motor and the angular velocity can be varied between 3 and 216 deg/hr. The thermal neutron detector was a high-efficiency end-window proportional counter, (25 mm dia) and having a working length of 130 mm. The counter was described by Bykov and Levdiv in Ref. 8, and is filled with

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86736

S/120/60/000/006/011/045
E032/E314

A Neutron-diffraction Apparatus Working in Conjunction with
the IRT Reactor

83% B¹⁰ enriched BF₃ gas at atmospheric pressure. The counter
is screened with a 100 mm thick layer of paraffin with B₄C.

Fig. 5 shows the diffraction pattern obtained in NaCl
and Fig. 6 shows the diffraction pattern of a polycrystalline
α-iron specimen. In the former case, the monochromatic
crystal was NaCl and in the latter case Pb. The instrument
was designed at the Institute of Physical Chemistry of the
AS USSR. There are 6 figures and 8 references: 4 Soviet
and 4 English.

ASSOCIATIONS: Institut fizicheskoy khimii AN SSSR
(Institute of Physical Chemistry of the
AS USSR)
Nauchno-issledovatel'skiy fiziko-khimicheskiy
institut (Scientific Research Physico-chemical
Institute)

SUBMITTED: November 28, 1959

Card 3/3

OZEROV, R.P.; KISELEV, S.V.; KARPOVICH, I.R.; GOMAN'KOV, V.I.; LOSHMANOV,
A.A.

Neutron diffractometer based on unit GUR-3 and equipped with remote control. Kristallografiia 5 no.2:317-319 Mr-Apr '60. (MIRA 13:9)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova.
(Neutrons—Diffraction)

GOVAN'KOV, V.I.; LOSHMANOV, A.A.

Antiferromagnetism in the Cr-Mn alloy. Kristallografiia 6
no.5:783-784 S-O '61. (MIRA 14:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii imeni Bardina.
(Chromium-manganese alloys--Magnetic properties)

18.1142

1530 1496 1482

33456

S/126/61/012/006/017/023
E073/E535

AUTHORS: Doroshenko, A.V., Klyushin, V.V., Loshmanov, A.A.
and Goman'kov, V.I.

TITLE: Neutron diffraction investigations of MnTe

PERIODICAL: Fizika metallov i metallovedeniye, v.12, no.6, 1961,
911-912

TEXT: MnTe was produced by vacuum sintering at 800°C of a mixture of 99.8% purity Mn and 99.99% purity Te, the structure and the composition of which were checked by X-ray analysis. Then, after additional crushing, the powder was pressed into a thin-walled aluminium cylinder 27 mm high with an internal diameter of 9.6 mm. The table herewith gives the calculated and experimentally determined values of the Bragg angles and of the corresponding interplanar distances. The magnetic reflections from (001) under the angle of 4°40' corresponds to the constant c of the crystal lattice and, consequently, along the c -axis the parameter of the elementary cell coincides with the parameter of the crystallo-chemical lattice. Furthermore, the appearance of this reflection indicates that the magnetic moments of the Mn

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33456

Neutron diffraction investigations ... S/126/61/012/006/017/023
E073/E535

atoms are located in the basal planes or form a small angle with these planes. A simplified model of the magnetic structure corresponding to the magnetic reflection from (001) will be the structure formed by ferromagnetic layers in the basal planes with magnetic moments that are perpendicular to the c-axis and anti-parallel as regards the magnetic moments in the adjacent basal planes. The presence of a magnetic reflection from (101), together with a reflection from (001), is natural for such a model. However, in this case there should be no reflection from (002). To get more accurate information on the magnetic structure of MnTe, the investigations are to be continued. Acknowledgments are expressed to A. K. Kikoin, B. G. Lyashchenko, D. F. Litvin and N. P. Grazhdankina. There are 1 figure, 1 table and 5 references: 2 Soviet-bloc and 3 non-Soviet-bloc. The English-language references read as follows: Ref.3: Kelley K.K. J.Amer. Chem.Soc., 1939, 61, 1, 203; Ref.4: Greenwald S. Acta Cryst., 1953, 6, 5, 396.

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Physics of Metals AS USSR)

SUBMITTED: June 3, 1961
Card 2/2

GOMAN'KOV, V.I.; LITVIN, D.F.; LOSHMANOV, A.A.; LYASHCHENKO, B.G.; PUZEY, I.M.

Neutron diffraction determination of the temperature dependence of the arrangement of atoms in a FeCo alloy. Kristallografiia 7 no.5:788-790 S-0 '62. (MIRA 15:12)

1. Institut pretsizionnykh splavov Tsentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii imeni Bardina.
(Iron-cobalt alloy) (Neutron diffraction crystallography)

GOMAN'KOV, V.I.; LITVIN, D.F.; LOSHMANOV, A.A.; LYASHCHENKO, B.G.

On the antiferromagnetic structure of chromium. *Kristallografiia* 7.
no.5:790-792 S-O '62. (MIRA 15:12)

1. Institut metallofiziki Tsentral'nogo nauchno-issledovatel'skogo
instituta chernoy metallurgii imeni Bardina.
(Ferromagnetism) (Neutron diffraction crystallography)
(Chromium)

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S/126/62/014/001/003/018

E032/E414

AUTHORS: Goman'kov, V.I., Litvin, D.F., Loshmanov, A.A.,
Lyashchenko, B.G.

TITLE: Neutron diffraction studies of Ni-Cr alloys

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.1, 1962,
26-29

TEXT: The authors report the design of a neutron diffractometer which can be used both with single crystals and polycrystalline materials. The neutron beam is collimated by a multi-slit collimator and has a divergence of about $24'$ at an intensity of 10^8 to 10^9 neutron/cm² sec. The beam is made monochromatic by reflection from the (111) plane of a lead single-crystal. The monochromatic beam is extracted through a special extraction channel in the boron-paraffin shield. The trolley carrying the specimen can be traversed across the beam so that wavelengths between 1.5 Å and "white" radiation can be covered. BF₃ filled counters enriched with B¹⁰ are used as detectors. The spectrometer incorporates various attachments such as a crystal calibrator, goniometer for large specimens, electromagnet, cryostat, high-Card 1/2

Neutron diffraction ...

S/126/62/014/001/003/018
E032/E414

temperature chamber, high-pressure multiplier, etc. In the present work the diffractometer was used to determine the magnetic moments of Ni and Cr in binary alloys containing 5.98 and 8.26 at.% Cr. The experiments were carried out at 77°K. The diffusely scattered background due to the specimen under investigation was determined with and without the magnetic field so as to separate out the magnetic component of the diffuse scattering. The preliminary conclusion is that the addition of Cr to the alloys gives rise to a reduction in the magnetic moment of Ni atoms. It is probable that the Cr moments are anti-parallel to the magnetic moments of the Ni atoms. It is stated that work on the Ni-Cr system is being continued. Academician G.V.Kurdyumov is thanked for his assistance. There are 3 figures and 1 table. f

ASSOCIATION: Institut metallovedeniya i fiziki metallov TsNIICHM
(Institute of Science of Metals and Physics of Metals
TsNIICHM)

SUBMITTED: November 28, 1961
Card 2/2

S/126/62/014/002/015/018
E073/E192

AUTHORS: Goman'kov, V.I., Litvin, D.F., Loshmanov, A.A., and
Lyashchenko, B.G.

TITLE: Ordering in Ni-Cr alloys

PERIODICAL: Fizika metallov i metallovedeniye, v.14, no.2, 1962,
305-307

TEXT: Ni-Cr alloys were investigated in the region of a Ni_2Cr super-lattice formation, using neutron diffraction and polycrystalline (20 to 35 at.% Cr) and single crystal (with nearly stoichiometric composition, 32.9 at.% Cr) specimens. The crystal was in the form of a sphere 8 mm in diameter. All the specimens were subjected to an equal heat treatment so as to obtain maximum ordering: quenching from 1200 °C in water and annealing at 500 °C for 1036 hours. No super-lattice lines were detected in neutron diffraction patterns of polycrystalline specimens. The $[110]$ zone of the single crystal showed reflections which are characteristic for the super-lattice Ni_2Cr . The dimensions of the anti-phase domains were evaluated as being at least 1200 Å. Neutron
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Ordering in Ni-Cr alloys

S/126/62/014/002/015/018
E073/E192

diffraction studies of the temperature dependence of the degree of distant ordering S can show whether there exists a real two-phase state with a degree of distant order in the new phase $S = 1$ or whether the single phase solid solution is retained with $S = 0.8$. The absence of any super-lattice reflections in the neutron diffraction photographs is explained by the authors by the low sensitivity of the powder method used in their experiments. There are 2 figures.

ASSOCIATION: Institut metallovedeniya i fiziki metallov
TsNIICHM
(Institute of the Science of Metals and the Physics
of Metals, TsNIICHM)

SUBMITTED: March 3, 1962

Card 2/2

LOSHMANOV, A. A., PURZEY, I. M., and GOMANKOV, V. I.,

"Neutron Diffraction Studies of Atomic Magnetic Moments of Fe, Ni, Co in Alloys."

report presented at the Symposium on Ferroelectricity and Ferromagnetism,
Leningrad, 30 May-5 June 1963.

GOMAN'KOV, V.I.; LITVIN, D.F.; LOSHMANOV, A.A.; LYASHCHENKO, B.G.; PUZEY, I.M.

Neutron diffraction examination for determining the temperature
dependance of the atomic order in the FeCo alloy. Ukr. fiz. zhur. 8
no.2:268-270 F 163. (MIRA 16:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii
i Institut metallovedeniya i fiziki metallov, Moskva.
(Neutron diffraction crystallography) (Iron-cobalt alloys)

L 20065-65 EPA(s)-2/EWT(m)/EPA(bb)-2/EWP(b)/EWP(t) Pt-10/Pad IJP(c)/SSD/AFWL
JD/HW

ACCESSION NR: AP4044142

S/0126/64/018/002/0178/0181

AUTHOR: Loshmanov, A. A.

B

TITLE: Atomic magnetic moments in Ni-Mn alloys
27 27

SOURCE: Fizika metallov i metallovedeniye, v. 18, no. 2, 1964, 178-181

TOPIC TAGS: magnetic scattering, thermal neutron, nickel manganese alloy

ABSTRACT: Using the method of incoherent magnetic scattering of thermal neutrons ($\lambda = 1.07 \text{ \AA}$), the author determined atomic moments in disordered Ni-Mn alloys containing 5.9 to 22.1 atomic % Mn at a temperature of 77K. Specimens were prepared in an induction furnace with Ar and homogenized for 1 hour at 1100C. Disordering was achieved by water quenching from 800C. In alloys containing 6 atm. % Mn atomic moments of Ni and Mn alloys decreased to 0.3μ . The dependence of concentration of atomic moments is explained on the basis of available theories. The contribution of Academician G. V. Kurdyumov, V. I. Goman'kov and A. V. Doroshenko is acknowledged. Orig. art. has: 2 fig-

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L 20065-65
ACCESSION NR: AP4044142

ures and 1 table

ASSOCIATION: TsniiChermet im.I. P. Bardina

SUBMITTED: 21Oct63

ENCL: 01

SUB CODE: MM, NP

NO REF SOV: 001

OTHER: 016

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L 20065-65

ACCESSION NR AP4044142

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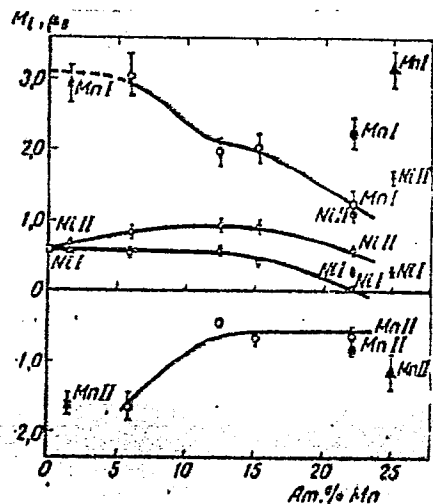


fig. 1 Concentration dependence of atomic moments of Ni and Mn:

○, □ - disordered alloys; ●, ■ - ordered alloy with 22.1% Mn; x, △ - alloy with 1.5% Mn; ▲, + ordered alloy Ni_3Mn ; (I) and (II) solutions of the system of equations for μ .

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ACCESSION NR: AP4023387

S/0048/64/028/003/0440/0443

AUTHOR: Puzey, I.M.; Goman'kov, V.I.; Loshmanov, A.A.

TITLE: Neutron diffraction determination of atomic magnetic moments in iron-nickel alloys containing Mo, Si and Cu [Report, Symposium on Ferromagnetism and Ferroelectricity held in Leningrad 30 May to 5 June 1963]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.3, 1964, 440-443

TOPIC TAGS: neutron diffraction, atomic magnetic moments, permalloy, impure permalloy, Mo permalloy, Si permalloy, Cu permalloy

ABSTRACT: The magnetic moments of Fe and Ni in 8 alloys of the permalloy type containing up to several percent Mo, Si or Cu were determined by the diffuse neutron scattering method of C.G.Shull and M.K.Wilkinson (Phys.Rev., 97,305,1955). The measurements were undertaken because of the interesting fact that both Fe and Ni have larger magnetic moments in their alloys than in the pure metals, and because there is evidence (I.M.Puzey, Fizika metallov i metallovedeniya, 12, No.3, 453, 1961) that Mo and Si differently affect the magnetic moments of Fe and Ni in these alloys. The apparatus has been described elsewhere (V.I.Goman'kov, D.F.Litvin, A.A.Loshmanov

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ACCESSION NR: AP4023387

and B.G.Lyashchenko, Fizika metallov i metallovedeniy, 14, 26, 1962). The alloys were prepared from electrolytic metals, were forged into bars, and quenched from 700°C in water to obviate ordering. Correction was made for the effect of multiple magnetic Bragg scattering. This correction was evaluated by extrapolating measurements on four samples of the same composition but different size to zero sample size. The measurements were performed at 77°C. The results are shown in the table below, which gives the decrease in the magnetic moments of Fe and Ni, in Bohr magnetons per percent admixture. It can be seen that Si affects Fe more strongly than does Mo

	Fe	Ni
Mo	.01	.07
Si	.03	.03
Cu	.00	.03

and Mo affects Ni more strongly than does Si. Measurements with colder neutrons will be required to elucidate the mechanism of this effect. "In conclusion, the authors thank B.G.Lyashchenko, D.F.Litvin and A.V.Doroshenko for assistance in the work." Orig.art.has: 2 figures and 2 tables.

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ACCESSION NR: AP4023388

S/0048/64/028/003/0444/0445

AUTHOR: Goman'kov, V.I.; Loshmanov, A.A.

TITLE: Atomic magnetic moments in iron-cobalt alloys [Report, Symposium on Ferromagnetism and Ferroelectricity held in Leningrad 30 May to 5 June 1963]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.3, 1964, 444-445

TOPIC TAGS: magnetic moment, atomic magnetic moment, alloy magnetic moment, iron-cobalt alloys, neutron diffraction

ABSTRACT: The magnetic moments of iron and cobalt in five iron-cobalt alloys containing from 33 to 60 atomic percent cobalt were determined by the unpolarized neutron scattering method described by C.G.Shull and M.K.Wilkinson (Phys.Rev.,97,304, 1955). These alloys were chosen for investigation because of the large values of their saturation induction. The samples were polycrystalline cylinders 9 mm in diameter and 50 mm long. They were annealed at 575°C and cooled slowly in order to achieve a state of maximum long range order. The neutron scattering was observed at room temperature with the apparatus described by V.I.Goman'kov, D.F.Litvin, A.A. Loshmanov and V.G.Lyashchenko (Fizika metallov i metallovedeniya,14,26,1962). No

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ACCESSION NR: AP4023388

corrections were made for multiple and inelastic magnetic scattering. The magnetic moments of iron and cobalt in the alloys were calculated from the intensities of the (100) superstructure reflection with and without an applied magnetic field. The values of the total magnetic moment per atom and the iron form factor, required for this calculation, were taken from the monographs of R.Bozorth and J.Bacon, respectively. The magnetic moment of cobalt was found to be 1.9 Bohr magnetons in all the samples. This agrees with the magnetic moment obtained by extrapolating the Slater-Pauling curve to the value for pure body-centered cobalt. The magnetic moment of iron increased from 2.77 Bohr magnetons in the alloy containing 33% cobalt to 2.94 in the alloy containing 60% cobalt. The iron magnetic moment increased most rapidly with the cobalt concentration in the range of low concentrations and it appears to reach a maximum at a concentration of about 50 or 60 atomic percent cobalt. "The authors thank B.G.Lyashchenko, D.F.Litvin, I.M.Puzey and A.V.Doroshenko for assistance in the work and for a valuable discussion." Orig.art.has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 10Apr64

ENCL: 00

SUB CODE: PH

NR REF SOV: 001

OTHER: 004

Card 2/2

LOSHMANOV, A.A.

Antiferromagnetism of chromium - manganese alloys. Kristallografiia
9 no.3:377-380 My-Je '64. (MIPA 17:6)

1. Institut metallovedeniya i fiziki metallov Tsentral'nogo
nauchno-issledovatel'skogo instituta chernoy metallurgii imeni
I.P. Bardina.

GOMAN'KOV, V.I.; PUZEY, I.M.; LOSHMANOV, A.A.

Study of the superstructure of Ni_3Fe . Kristallografiia 10 no.3:
416-418 My-Je '65. (MIRA 18:7)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii imeni I.P. Bardina.

LAPSHIN, A.P.; LOSHMANOV, I.A.

Changing the method of washing pipes of waste-heat boilers of
open-hearth furnaces. Sbor. rats. predl. vnedr. v proizvod.
no.2:45-46 '61. (MIRA 14:7)
(Boilers—Maintenance and repair)

UCHITEL', M., inzh.; LOSHMANOVA, M., inzh.; KAPUSENKO, V., inzh.;
BABININA, T.; GATSKO, V. (g.Kolomna, Moskovskoy oblasti).

Customers pass their judgement. Prom.koop. 14 no.8:26 Ag '69.
(MIRA 13:8)

1. Otdel bytovogo obsluzhivaniya oblpromsoвета, g.Chelyabinsk
(for Uchitel', Loshmanova, Kapusenko). 2. Starshiy inzhener otdela
obsluzhivaniya Litpromsoвета, g.Vil'nyus (for Babinina).
(Service industries)

L 04662-67 EWT(m)/T/ENP(t)/ETI IJF(c) JD/WB

ACC NR: AP6007105

SOURCE CODE: UR/0129/66/000/002/0021/0025

AUTHORS: Pogodina-Alekseyeva, K. M.; Loshnevskaya, A. A.

ORG: All-Union Polytechnic Correspondence Institute (Vsesoyuznyy zaochnyy politekhicheskiy institut)

TITLE: Influence of induction heating on the fine structure of austenitic stainless steel

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 2, 1966, 21-25

TOPIC TAGS: austenite steel, alloy steel, intergranular corrosion, nickel steel, austenitic steel / Kh18N9T austenitic steel

ABSTRACT: The effect of several induction heating parameters (temperature, rate of heating, and duration of annealing) on the fine structure of austenitic steel Kh18N9T was investigated. The microstructure was studied by electromicroscopy. The induction heating was applied after the method of K. Z. Sheplyakovskiy (MITOM, 1963, No. 6). The experimental results are presented graphically (see Fig. 1). It was found that isothermal aging at 1100C leads to a dissolution of chromium carbides and to an increase of resistance to intercrystalline corrosion. It is concluded that the tendency of steel Kh18N9T to develop intercrystalline corrosion depends on the amount and the nature of the distribution of chromium carbides in the latter (the tendency towards intercrystalline corrosion is increased if the chromium carbides are

Card 1/2

UDC: 620.196:621.785.545.4:669.14.018.84

L 04662-67
ACC NR: AP6007105

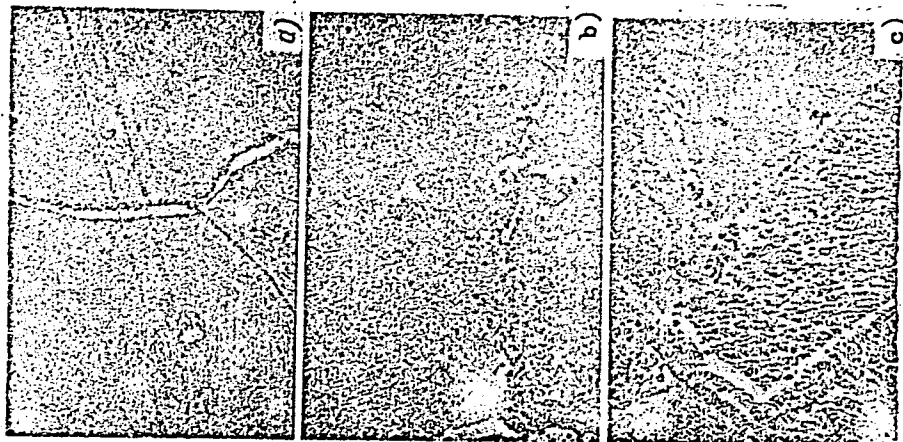


Fig. 1. Structure of steel Kh18N9T after induction quenching from 1100C. a - 30 sec, x 5000; b - 30 sec, x 7000; c - 1 min, x 5600.

distributed in the form of strings along grain boundaries or if local concentration of chromium carbides exists in the steel). Orig. art. has: 3 graphs.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 001
kh

Card 2/2

LOSIAK, S.

"Mechanization of the pressing industry." p. 59. (ODZIEZ, Vol. 5, no. 3, Mar. 1953, Lodz, Poland)

SO: Monthly List of East European Accessions, L. C., Vol. 3, No. 5, May 1954, Uncl.

BEBEN, Artur, mgr.inz.; LOSIAK, Stanislaw, mgr.inz. (Krakow)

Problems of labor mechanization in small quarries. Cement wapno gips
17 no.4:106-108 Ap '62

BEBEN, Artur, mgr inz.; ENGEL Zbigniew, dr inz.; LOSIAK, Stanislaw, mag.iur.

Possibilities of shot-hole drilling in hardened iron slag.
Hutnik P 30 no. 7/8:229-235 J1/Ag'63.

1. Akademia Gorniczo-Hutnicza, Krakow.

LOSIAK, Z.

Lighting in a switchboard.

P. 57 (WIADOMOSCI ELEKTROTECHNICZNE) (Warsaw, Poland) Vol. 17, no. 3. Mar 1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958

LOSIECZKA, Kazimierz

SURNAME, Given Names

Country: Poland

Academic Degrees: [not given]

Affiliation: [not given]

Source: Lublin, Medycyna Weterynaryjna, Vol XVII, No 10, October 1961,
pp 589-590

Data: "Control of Tuberculosis in Cattle at a State Agricultural
Farm in the Zlotoryja Powiat."

GPO 981643

72

LOSIK, L.I.; BALANTER, I.I.

Organizing the complete processing of corn. Sakh. prom. 33
no.8:58-61 Ag '59. (MIRA 12:11)

1.Giprosptirvino.
(Cornstarch) (Starch industry--Equipment and supplies)

TERNOVSKIY, N. S.; LOSIK, L. I.

Development and manufacture of the new type of technological equipment for the distilling industries. Spirt. prom. 29 no.3: 22-24 '63.
(MIRA 16:4)

1. Gosudarstvennyy komitet po avtomatizatsii i mashinostroyeniyu pri Gosplane SSSR (for Ternovskiy). 2. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy spirtovoy i vinodel'cheskoy promyshlennosti (for Losik).

(Distilling industries—Equipment and supplies)

LOSIK, M.S., inzh.

Electric heating of concrete, foundation parts and bitumen
at the Gorkiy Hydroelectric Power Station site. Gidr.stroi.

26 no.9:17-19 S '57.

(MIRA 10:10)

(Concrete construction)

IOSIK, M.V.

A certain class of Kawaguchi spaces. Dokl. AN SSSR 134 no.6:1299-
1302 0 '60. (MIRA 13:10)

1. Predstavleno akademikom I.G.Petrovskim.
(Spaces, Generalized)

27309

S/199/61/002/004/005/007

B112/B108

16.4900

AUTHOR: Losik, M. V.

TITLE: Geometrical interpretation of certain conditions for an ordinary variational problem with higher derivatives

PERIODICAL: Sibirskiy matematicheskiy zhurnal, v. 2, no. 4, 1961, 556-567

TEXT: The author studies the variational problem which is defined by the invariant integral

$$\int_{t_1}^{t_2} L(\{ \alpha, \frac{d^i \{ \alpha \}}{dt^i} \}) dt$$

($i = 1, 2, \dots, v$, $\alpha = 1, 2, \dots, n$). The author interprets this integral - according to A. Kawaguchi (J. Fac. Sci. Hokkaido Imp. Univ., 9 (1940) 1 - 152; 10 (1941)) - as the length of curve (metric) in a space X_n which is referred to the coordinates $x^{(i)\alpha} = d^i \{ \alpha \} / dt^i$. The group $D_{(v,n)}$ of the transformations

Card 1/3

X

Geometrical interpretation of certain ...

27309
S/199/61/002/004/005/007
B112/B108

$$x^{(i)\alpha} = i! \sum_{k=1}^i \frac{1}{k!} f_{\alpha_1 \dots \alpha_k}^{(i)} \sum_{(i_1 + \dots + i_k = v)} \frac{x^{(i_1)\alpha_1} \dots x^{(i_k)\alpha_k}}{i_1! \dots i_k!}$$

with the parameters f which are symmetrical in their subscripts defines a tangential space T_{vn} in each point of X_n . The group $P_{(v,n)}$ of the transformations

$$\bar{x}^{(i)\alpha} = i! \sum_{k=1}^i \frac{1}{k!} x^{(k)\alpha} \sum_{(i_1 + \dots + i_k = 1)} \frac{p_{i_1} \dots p_{i_k}}{i_1! \dots i_k!}$$

defines a projective space $T_{vn}/P_{(v,n)}$. The author calls the points of the space T_{vn} vectors of the order v . The points of the space $T_{vn}/P_{(v,n)}$ are called directions of the order v . On the basis of these definitions the author can give a geometrical interpretation of a number of conditions in calculus of variations. The most important interpretation refers to transversality: if a given curve is a curve of extreme length, it is an extremal on a family of surfaces. The tangent spaces at its ends are

Card 2/3

Geometrical interpretation of certain ...

27309

S/199/61/002/004/005/007

B112/B109

transverse vector spaces of the order $2v - 1$, whose vectors are tangential to the ends of the curves. The present paper was made under the supervision of V. V. Vagner. There are 7 references: 3 Soviet and 4 non-Soviet.

SUBMITTED: March 11, 1960

Card 3/3

LOSIK, M.V.

Kawaguchi spaces related to Klein spaces. Trudy Steklov
i tenzanal. no.12:213-237 '63. (MIRA 16:6)
(Spaces, Generalized)

LOSIK, M.V.

Klein's spaces as Kavaguchi spaces. Dokl. AN SSSR 139. no.6:
1299-1301 Ag '61. (MIRA 14:8)

1. Predstavleno akademikom I.G. Petrovskim.
(Hyperspace)

IOSIK, M.V. (Saratov)

Infinitesimal connections in tangents to fiber spaces. Izv. vys.
uchsb. zav.; mat. no.5:54-60 '64. (MIRA 17:12)

PENZOV, YuYe.; RZHEKHINA, N.F.; GOKHMAN, A.V.; KABANOV, N.I.; KONOPLIVA,
Yu.K.; LOSIK, M.V.; SPIVAK, M.A.; ZARETSKAYA, N.V., red.

[Problems in vector algebra] Sbornik zadach po vektornoj
algebre. Saratov, Izd-vo Saratovskogo univ., 1964. 59 p.
(MIRA 18:4)

L 23878-66 EWT(m)/I/ETC(m)-6 WW/DJ

ACC NR: AP6009928

SOURCE CODE: UR/0413/66/000/004/0121/0122

AUTHOR: Losik, V. I.; Rizhamadze, G. V.; Nevelich, V. V.; Vasil'tsov, E. A.; Voronin, N. I.

39
B

ORG: none

TITLE: A combination ball-hydrostatic thrust bearing.¹¹³ Class 47, No. 179135
[announced by Leningrad Branch, All-Union Scientific Research and Design Institute of
Chemical Machine Building (Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta khimicheskogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 121-122

TOPIC TAGS: antifriction bearing, ball bearing

ABSTRACT: This Author's Certificate introduces: 1. A combination ball-hydrostatic thrust bearing with upper and lower rings. The lower ring has a chamber for the working fluid and is supported by a roller bearing. In order to improve working conditions and relieve the bearing during operation, the lower ring has internal grooves which form additional chambers connected by channels with the chamber for the working fluid. Inside these grooves are elastic elements fastened to the ring. 2. A modification of this bearing in which the elastic element is made in the form of a spring-return piston. Sliding freely in this piston is a rod which is rigidly fastened in

Card 1/2

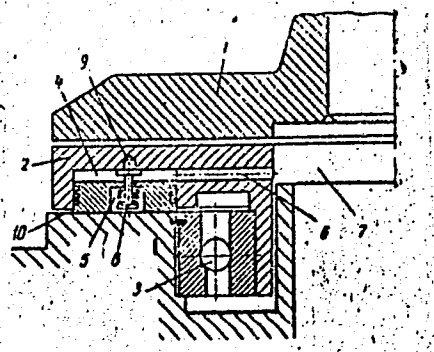
UDC: 621.822.2-219

2

L 23878-66

ACC NR: AP6009928

the upper section of a groove in the lower ring.



1--upper ring; 2--lower ring; 3--roller bearing; 4--chamber for the working fluid; 5--internal grooves; 6--channel; 7--chamber; 8--spring-return piston; 9--rod; 10--stationary surface.

SUB CODE: 13/

SUBM DATE: 29Dec63/

ORIG REF: 000/

OTH REF: 000

Card 2/2 dda

ACC NR: AP7000364

SOURCE CODE: UR/0413/66/000/022/0136/0136

INVENTOR: Vasil'tsov, E. A.; Voronin, N. I.; Losik, V. I.; Nevelich, V. V.

ORG: None

TITLE: A hermetically sealed electric drive. Class 47, No. 188799 [announced by the Leningrad affiliate of the All-Union Scientific Research and Design Institute of Chemical Machine Building (Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo i konstruktorskogo instituta khimicheskogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 136

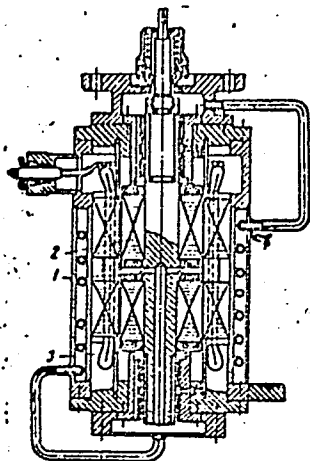
TOPIC TAGS: centrifugal pump, electric equipment, drive train, HERMETIC SEAL

ABSTRACT: This Author's Certificate introduces a hermetically sealed electric drive containing a housing with bearings, a stator with shielded casing, a rotor and a pump on the rotor shaft for self-contained lubrication of the journal bearings. To reduce hydraulic losses, improve the resistance of the electric drive to vibrations and eliminate the harmful effect of axial forces, the impeller of the centrifugal pump is mounted without play inside the rotor between its blocks. The end surfaces of the rotor are equipped on both sides with thrust collars supported by the bearings.

Card 1/2

UDC: 621.313.29-233.2-752.7

ACC NR: AP7000364



1--impeller; 2--rotor blocks; 3--thrust collars

SUB CODE: 13/ SUBM DATE: 23Jan64

Card 2/2

co

22

Regenerating turbine, transformer and Diesel oils. A. M. GUTSAY AND B. V. LOMAKOV. *Izvestiya Teploelek. Inst. No. 7, 52-61(1931)*.—Turbine oils (used) were treated with a variety of substances. Conclusion: There is no universal method for regenerating these oils. Water glass can be used only for slightly deteriorated oil. This treatment should be followed by a thorough washing with H_2O . Highly deteriorated oils cannot be restored by treatment with adsorbents; good results, however, can be obtained with oils which are only slightly acidic. Filtration through adsorbents gives good results, and the adsorbents can be used again when regenerated. Light oils can be treated with caustic soda and adsorbents with good success. This method is also good for Diesel oils. Diesel oils can be regenerated by treatment with H_2SO_4 (2-2.5%) and fuller's earth or other adsorbents (6-10%) at 140° . A treating plant is described.

A. A. BOWENLINGER

CA

22

Viscosity and surface tension of cylinder oils at high temperatures. B. V. Loskov, N. R. Barmakov and M. S. Kurenkova. *Azərbaycanşənə Nəşriyyatı* Khos. 19, No. 7, 26-31 (1939); *Chem. Zentr.* 1939, II, 4415.—The viscosity of the oils was measured at 100-350°, with an Ostwald viscometer surrounded by vapor (water, xylene, naphthalene, and benzol). With increase in temp. there was a gradual equalization of the viscosities of the different oils. Expressed in Engler degrees, the viscosities of the oil-asphalt mixt. and of the cylinder oils differed by 340% at 100° and by only 20% at 216°. For petrolatum with $E/100 = 2.96$ and asphalt-oil mixt. with $E/100 = 17$, the difference at 345° was practically 0 ($E = 0.00$). The method of Kantor and Schrödinger was used for the detn. of surface tension. Detns. were made at temps. of 78-286°. The surface tensions of all oils at high temps. are practically the same. Distillates, residues, and refined oils of varying degrees of purity were tested. Exceptions to the above statement are a few imported oils, which are petroleum oils with a paraffin base and in addn. are compounded with fats. M. G. Moore

LOSIKOV, B. V.

Ekspluatatsiia turbinnykh masel. Moskva, Gostoptekhnizdat, 1941. 146 p.
diagrs.

Use of turbine lubricants.

DLC: TJ789.L6

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library
of Congress, 1953.

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
COMMON ELEMENTS																																																			
COMMON VARIABLES INDEX																																																			
<p>21</p> <p><i>ca</i></p> <p>(The stability of coal-mazut suspensions. III. B. V. Rosikov. <i>Izvest. Vsesoyuz. Tekhnich. Inst.</i> 14, No. 5, 20-33(1941); <i>Chem. Zentr.</i> 1943, II, 880-1. -Previous work had shown that the formation of stable suspensions is dependent in part on the swelling of the coal, not only for changes in viscosity with time, but also effects due to degree of coal pulverization and to temp. In the present work the swelling of 4 characteristic coal types, Donetsk lean coal, Donetsk gas coal, Tcheremchovo brown coal, and Moscow boghead coal, was examd. in various pure hydrocarbons, phenols, bases, and mixts. of these materials as well as in mazut, with and without admixts. The rate of swelling increases with temp. The degree of swelling is affected most by the type of solvent and the type of coal. Naphthenes and polycyclic aromatic compds. as well as resins of mazut caused little or no swelling, but amines, especially pyridine bases, and phenols showed greatest swelling. Since all compds. that are recognized as good solvents cause swelling, this effect appears to be a primary factor in soln. The heat of wetting of the solvent is proportional to its power for swelling. The moisture content of the coal had no particular effect on swelling. The addn. of active materials such as phenol and quinoline to mazut lends greater stability to suspensions and also allows use of coarser coal, but the viscosity of such blends is very high. G. C. Soth.</p>																																																			
<p>ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			
<p>1ST AND 2ND ORDERS</p>																																																			
<p>3RD AND 4TH ORDERS</p>																																																			

LOSIKOV, B. V.

LOSIKOV, B.V.

~~Physical and chemical principles in the reclamation of oil~~

[Physical and chemical principles in the reclamation of oil]
Fiziko-khimicheskie osnovy regeneratsii masel. Moskva-Lenin-
grad, Gostoptekhizdat. 1945. 137 p. (MLRA 7:5)
(Oil reclamation)

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSING AND PROPERTY INDEX																			
<p>F</p> <p>2664, EFFECT OF ADDITIVES ON SERVICE CHARACTERISTICS OF DIESEL LUBRICANTS. Tonkha, K. K., Lysikov, B. V. and Khalif, A. L. (Neftyanoe Khoz., 1946, 24, No.11, 54-8; Chem Abstr., 1947, 41, 3940).</p> <p>Several lubricating oils with or without different addition agents were tested in high-speed Diesel engines to determine their effectiveness in preventing deterioration of the oil, corrosion of bearing alloys and wear of piston rings. The results indicate that Aerolube and Delo are excellent all-purpose additives. Paranox, though satisfactory otherwise, does not stabilize the oil and will prevent corrosion only if the nature of the alloy is such as to enable formation of a protective film with the S present in Paranox. Oil 9370, an imported product, apparently contains a powerful antioxidant since the acid no. of the oil was the same after 100 hrs. of service and no film was formed on the bearing surface. With Santolube 303A, a detergent additive, the engine remained free of C deposits after 350 hrs.</p>																			
<p>ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																			
HIGH SPEED										HIGH SPEED									
HIGH SPEED										HIGH SPEED									

LOSIKOV, B. V.

Author: Loskov, B. V.

Title: Physico-chemical principles of oil recovery.
Fiziko-khimicheskie osnovy regeneratsii masel.
161 pp.

City: Moscow

Date: 1948

Subject: Oil reclamation

Available: Library of Congress, Call No: TP687.L67 1948

Source: Lib. of Cong. Auth. Cat., 1950

A good manual on properties, classification and applications, in addition to the technology of and processes used in oil recovery.

B. abs.

81-3, Petroleum.

Use of rust inhibitors in lubricating oils. V. V. Loshakov, A. L. Khalil, and L. A. Aleksandrova (*Nat. Khim.*, 1948, No. 8, 47-52; *J. Inst. Petrol.*, 1948, 34, 307A).—Tests were made of the anti-corrosive effects of adding various compounds to turbine oils. A polished steel plate, after being dipped in the oil, was suspended in a water-bath at 60° and 70°, and the period which elapsed before rusting became visible was noted. The Amer. Soc. Test. Mater. (D288-44T) procedure was also used. Results show that chloro- and nitro-derivatives of aromatic hydrocarbons, and stearic, oleic, abietic, and naphthenic acids and their salts do not give adequate protection from corrosion; unsaturated fatty acids are unsuitable due to their harmful effect on demulsification properties. Excellent results were obtained when using 0.5% of specially-synthesized mixed ("MT") additives based on compounds with one or more double bonds, and possessing secondary valency (no further details are given). These additives in some cases improve the demulsification properties of the oil and do not impair its stability to oxidation. R. B. CLARK.

LOSIKOV, B. V. and LUKASHEVICH, I. P.

Petroleum Goods. 1950. (Neftyanoye tovarovedeniye).

LOSIKOV, B.V.

Petroleum products and refining: textbook. Moskva, Gos. nauchno-tekhn. izd-vo nef'tianoi
i gorno-toplivnoi lit-ry, 1950. 419p. 51-22358

tp690.L67 1950

LOSIKOV, B

V

N/5
614.7
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Khimiya Mineral'nykh Masel (The Chemistry of Mineral Oils, by) N. I. Chernozhukov, S. E. Kreyn (i) B. V. Losikov. Moskva, Gostoptekhizdat, 1951.
307 p. Illus., Diagr., Tables.
Bibliographical Footnotes.

LOSIKOV, B.V.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Chernozhukov, N.I.	"Chemistry of Mineral	Moscow Petroleum Institute
Kreyn, S.E.	Oils" (student manual)	imeni Acad I.M. Gubkin
Losikov, B.B.		

SO: W-30604, 7 July 1954

LOSIKOV, B. V.

AID P - 288

Subject : USSR/Engineering
Card : 1/2
Author : Losikov, B. V., Makasheva, O. P. and Aleksandrova, L. A.
Title : Mechanism of action of anti-corrosion additives to mineral oils
Periodical : Neft. Khoz., v. 32, #4, 65-72, Ap 1954
Abstract : The authors present the results of their experiments on the effect of temperature and additives on the formation of protective film over the surface of copper-lead specimens. Additives of Soviet types H₃ and H₄ were used in the aviation lubricating oil of types PC-13, AzNII-TsIATIM-1 (Azerbaijani Scientific Research Institute - Central Scientific Research Institute of Aviation Fuels and Oils - 1). Copper-lead specimens of small plates or of powdered forms were subjected to tests. The mechanism of the formation of protective film is described and presented in 6 charts and 4 tables based on test results.

Translation D 217022, 12 Apr 55

AID P - 340

Subject : USSR/Chemistry
Card : 1/2
Author : Losikov, B. V.
Title : Mechanism of action of anti-corrosive additives to mineral oils
Periodical : Neft. Khoz., v. 32, #5, 61-67, My 1954
Abstract : The action of anti-corrosive additives is studied by the same method as described in the previous article (Neft. Khoz., #4, 65, 1954), in which metallic plates were substituted for by metallic powder. The rate of protective film formation is studied with the rate of loss of weight of different powders in oil of different temperatures. The mechanism of the film formation is explained partially by the chemical bound with the basic metal and partially by forces of physical absorption. In the second part of the article the author discusses the anti-oxidation action of anti-corrosive

Translation D178245 - May 54

Neft. Khoz., v. 32, #5, 61-67, My 1954. (additional card) AID P - 340

Card : 2/2

additives. 8 charts, one table and one Russian
reference (1946).

Institution : None

Submitted : No date

LOSIKOV, B.V.

LOSIKOV, B.V.; PUCHKOV, N.G.; ENGLIN, B.A.; L'VOVA, L.A., vedushchiy
redaktor; TROFIMOV, A.V., tekhnicheskii redaktor

[Principles of petroleum products utilization] Osnovy primeneniia
nefteproduktov. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-
toplivnoi lit-ry, 1955. 461 p. (MIRA 8:3)
(Petroleum products)

Losikov, B.V.

6 Ways of preventing corrosion of contemporary antifriction
alloys. B. V. Losikov. *Vestnik Mashinostroeniya* 35,
No. 8, 58-60(1955). A summary. J. D. Cat

2051XCV, B.V.

USSR/Analytical Chemistry - General Questions, 0-1

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1196

Author: Losikov, B. V., Kaverina, N. I., and Fedyantseva, A. A.

Institution: None

Title: A Chromatographic Method for Determining the Fractional Composition of High Polymers

Original
Periodical: Khimiya i tekhnol. topliva, 1956, No 3, 51-53

Abstract: The results of the chromatographic resolution of polyisobutylene (I) fractions are recorded. The adsorbent used consisted of activated BAU charcoal and MSK silica gel. Two types of I with average molecular weights of ~18,000 and ~27,000 were investigated. Before charging into the column I was dissolved in iso-octane; ratios of 1:10 or 1:12 were used. For the rough resolution of I columns of small dimensions were used (l = 1,300 mm and d = 17 mm); finer fractionation was achieved with larger columns (l = 1,800 mm and d = 26 mm); iso-octane and benzene (in the final stage) were used in development. The data

Card 1/2

AID P - 5077

Subject : USSR/Engineering

Card 1/2 Pub. 128 - 6/26

Authors : Losikov, B. V., Prof., Dr. Tech. Sci., and L. A.
~~Aleksandrova~~, Kand. Tech. Sci.

Title : Corrosion inhibitors in lubricants for intermittently running machines.

Periodical : Vest. mash., 5, 12-15, My 1956

Abstract : Corrosion protection of machine parts is very important, especially when the machine is not running. Various admixtures, called corrosion inhibitors, are added to lubricants for improving their protective properties. The authors analyzed under laboratory conditions the effectiveness of different corrosion inhibitors. The method of the "moisture chamber" (GOST 4699-49) was used. The tests are described and other testing methods are discussed. The results are compared with results

AID P - 5077

Vest. mash., 5, 12-15, My 1956

Card 2/2 Pub. 128 - 6/26

obtained by other scientists. 3 tables, 3 diagrams.
10 references.

Institution : None

Submitted : No date

LOSIKOV, B.V.

ZUIDEMA, G.G., [Zuidema, H.H.],; MYSHKIN, Ye.A., kand. tekhn. nauk, [translator],;
LOSIKOV, B.V., prof., doktor tekhn. nauk, red.; LOZBYAKOVA,
Ye. S., ved. red.; KRDENKO, V.S., tekhn. red.

[Performance of lubricating oils] Eksploatatsionnye svoistva
smazochnykh masel. Moskva, Gos. nauchno-tekhn. izd-vo neft. i
gorno-toplivnoi lit-ry, 1957. 170 p. [Translated from the English].
(MIRA 11:11)

(Lubrication and lubricants)

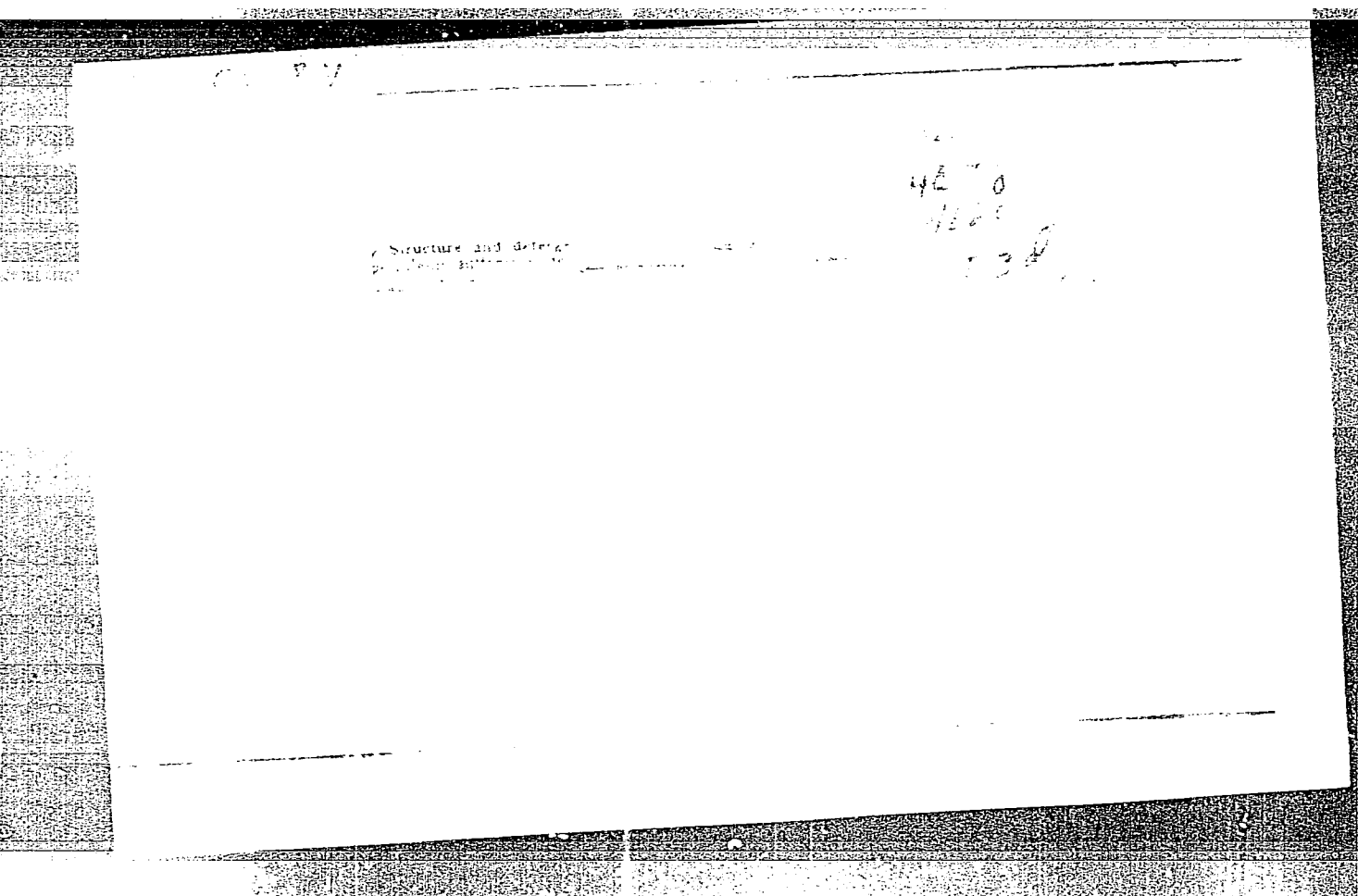
LOSIKOV, B.V.

LOSIKOV, B.V., prof. red.; KREYN, S.E., prof. red.; FUKS, G.I., kand. khim. nauk; red.;
LOSBYAKOVA, Ye.S., vedushchiy redaktor; MUKHINA, E.A., tekhn. red.

[Improvement in the quality and the use of lubricants; a collection of papers] Povyshenie kachestva i primeneniye smazochnykh materialov; sbornik dokladov. Moskva, Gos. nauchno-tekhn. izd-vo nefi i gorno-toplivnoi lit-ry, 1957; 364 p. (MIRA 10:12)

1. Moskovskiy dom nauchno-tekhnicheskoy propagandy imeni F.E. Dzerzhinskogo.

(Lubrication and lubricants)



LOSIKOV, B.V.

A useful book ("Physics and chemistry in oil refining" by B.A.
Chernyshev, Revised by B.Losikov). Neft.khoz. 35 no.2:67-68 (MLRA 10:3)
F '57.

(Petroleum--Refining)
(Chernyshev, B.A.)

LOSIKOV, B. V., FEDYANTSEVA, A. A. and KAVERINA, N. I.

"Determining the Fractional Composition of High-Polymeric Lubricating Oil Additives"

Composition and Properties of the High Molecular Weight Fraction of Petroleum; Collection of Papers, Moscow, Izd-vo AN SSSR, 1958. 370pp (Inta nefti)
2nd Collection of papers publ. by AU Conference, Jan 56, Moscow.

The authors show that chromatographic adsorption can be used as a method for separating polyisobutylene and vinypol, with active carbon or silica gel as adsorbent. The method can be of considerable interest in estimating the quality of high-polymer viscous additives in oils. It can also be used in obtaining polymer fractions with equal molecular weights. There are 5 tables, 1 figure, and 3 references of which 2 are German and 1 English.

Losikov, B. V.

65-58-4-6/12

AUTHOR: Losikov, B. V.

TITLE: On Fuels for Gas Turbine Power Stations (O toplive dlya gazoturbinnnykh energeticheskikh ustanovok)

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 4, pp 32 - 39 (USSR)

ABSTRACT: Gas turbines are used increasingly in Power Stations, as well as in industry and transport. The actual efficiency of diesel plants is about 0.30 - 0.40, but in boiler turbine plants it is 0.20 - 0.22; for gas turbine plants (RTY) it is 0.27 when the air pressure in front of the combustion chamber is 10 kg/cm², for temperatures of the gases up to 800°C. The advantages of gas turbines (their small weight and the possibility of using gaseous, liquid or solid fuels) are discussed. This is a review which covers previous work on the construction of combustion chambers, and selection of the conditions regulating the process is mentioned (Refs. 1 and 2), as well as problems of the prevention of corrosion and of the formation of deposits. In one of the earlier publications it was shown that all alloys corrode when a mixture of the compounds used (V₂O₅, Na₂SO₄) is in contact with the alloys at temperatures exceeding 650°C (Ref. 5). The mechanism of corrosion of vanadium i.e. the formation of V₂O₅, is explained. Fig. 1 shows the effect of the ratio

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On Fuels for Gas Turbine Power Stations

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vanadium:sodium on the corrosion of alloys (E. B. Evans et al). The residual petroleum fuels from low sulphur content petroleum containing less than $1 \times 10^{-3}\%$ vanadium can be used in all gas turbines which are adapted for the combustion of heavy residual fuels. Lubricants from sulphur - petroleum containing more than $1 \times 10^{-3}\%$ vanadium can be used in gas turbines where the temperature of the gas before entering the turbine does not exceed 650°C . The use of fuels with a high percentage of vanadium, which is characteristic for lubricants from sulphur-containing petroleum, causes serious complications i.e. the formation of deposits and corrosion of the plant. Research, as well as experimental work, should be carried out in this field. The use of distillate fuels, such as diesel fuels (whatever its sulphur content) should not cause any difficulties. Distilled fuels obtained by steam distillation should be given preference to products obtained by thermal and catalytic cracking, or by coking. Fig.2 shows the effect of sulphur on corrosion caused by fuels containing vanadium and sodium; Fig.3 shows the effect of

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On Fuels for Gas Turbine Power Stations

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temperature on the corrosion of alloys. There are
2 Tables, 3 Figures, 13 References:- 6 English and
7 Russian.

Card 3/3

1. Gas turbine fuels-Performance
2. Gas turbine fuels-Impurities
3. Gas turbines-Applications
4. Gas turbine fuels-Corrosive effects
5. Vanadium-Corrosive effects

KREYN, Solomon Efraimovich; KULAKOVA, Revekka Viktorovna; LOSIKOV,
B.V., red.; BORUNOV, N.I., tekhn.red.

[Petroleum insulating oils] Neftianye izoliatsionnye masla.
Moskva, Gos.energ.izd-vo, 1959. 143 p. (MIRA 12:8)
(Insulating oils)

30222
S/081/61/000/019/067/085
B117/B110

11.0130
AUTHORS:

Rubinshteyn, I. A., Losikov, B. V., Sobolev, Ye. P.,
Zaychik, M. G.

TITLE:

Influence of organic sulfur compounds on the low-temperature
properties and oxidizability of kerosene - gas-oil fractions

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 19, 1961, 423, abstract
19M180 (Sb. "Khimiya sseraorgan. soyedineniy, soderzhashchikh-
sya v neftyakh i nefteproduktakh". M., AN SSSR, 1959,
304 - 315)

TEXT: With the aid of gas oils from Romashki and Tuymazy petroleum it
has been shown that sulfur compounds (SC) prevent the autocatalytic
development of the oxidation process. The antioxidizing effect of SC con-
sists in their reaction and the reaction of their oxidation products with
peroxide radicals or hydrogen peroxides of hydrocarbons. Simultaneously,
SC accelerate the oxidative polymerization and condensation leading to the
accumulation of tarry substances. The least permissible concentration of
SC in gas-oil from this standpoint depends on the chemical structure of

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B117/B110

Influence of organic sulfur...

SC and on the composition of oxidizable gas-oil. At low concentration, SC prevent the formation of acid, hydroxyl-containing, saponifiable substances formed by oxidative decomposition of peroxides. The optimum total S concentration depends on the chemical structure of SC and, apparently, on the chemical composition of gas-oil. The tarry substances contained in Romashki gas-oil are no antioxidants and have no essential effect on the character and kinetics of its oxidation. A profound extraction of SC from kerosene - gas-oil fractions with a small (optimum) quantity of SC is required. The latter is determined in advance for the relevant petroleum product subjected to hydrogenative-refining. The presence of SC in paraffin petroleum products promotes the reduction of the temperature of structure formation. [Abstracter's note: Complete translation.] ✓

Card 2/2

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Abstracts were made of the following articles:
Oxidation of hydrocarbons by nitrous acid; normally alkyl radicals (oxidation of hydrocarbons in the liquid phase) Collection of Articles; Moscow, Ltd-to MS ISSN 0013-788X. 1979. 34 p. Kerosene ally inserted. 2,200 copies printed.

Dr. B. N. Bannai, Corresponding Member, Academy of Sciences
USSR, Institute of Physics, Acad. Sci. USSR, Moscow, U.S.S.R.

REMARKS: This collection of articles is intended for chemists interested in nitrogenous oxidation reactions, particularly for those specializing in pyrolytic fuels.

concluded. This collection of 35 articles represents the results of investigation carried out during a period of several years on problems of hydrocarbon oxidation. The authors present their own theoretical and experimental data and also draw on relevant literature. So far as possible, references are given in the original form of the articles.

Research Institute of the

Curry, A., and E. L. Shilling [combustion]. The Role of Metals in Combustion and Lubricating Materials. In *Combustion and Lubrication in Liquid-Phase Oxidation of Hydrocarbon Fuels*. The authors discuss the necessity of preventing the metals from coming in contact with various metals during oxidation, poisoning and storage.

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Leather Dye (continued)
Materials: Parawaxing metal electrolyte solution
 Cattle hair with chrome
 35 "Leather-Dye" and 15 tributylphosphate initiates the
 initial oxidation of hair in contact with metal by parawaxing
 the latter. The hair without the additive.

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[illegible]

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Losikov, B.V.

PHASE I BOOK EXPLOITATION

SOV/1948

15(5)

Chernozhukov, Nikolay Ivanovich, Solomon Efraimovich Kreyn, and
Boris Vital'yevich Losikov

Khimiya mineral'nykh masel (Chemistry of Mineral Lubricating Oils)
2d ed., rev. Moscow, Gostoptekhizdat, 1959. 414 p. 4,000 copies
printed.

Exec. Ed.: L.A. L'vova; Tech. Ed.: A.S. Polosina,

PURPOSE: This book is intended for engineers and scientific person-
nel engaged in lubricating oil chemistry and technology.

COVERAGE: This is an enlarged and revised edition of the original
work of the same title published in 1951. It clarifies the basic
problems relating to the nature of lubricating oils, the changes
involved under these conditions, and the technology
mental material on the chemical composition, inner structure,
solubility, viscosity, lubricating properties, resistance to

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SOV/1948

Chemistry of Mineral Lubricating Oils

oxidation, scrubbing, dispersing, and corrosive properties of
lubricating oils. No personalities are mentioned. Each chapter
is accompanied by references.

TABLE OF CONTENTS:

Preface to the Second Edition

Ch. I. Chemical Composition of Lubricating Oil Fractions

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5. Phenols

Ch. II. Physical Properties of Lubricating Oil Fractions

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